

AMENDMENTS TO THE CLAIMS

Please cancel Claims 7 and amend Claims 1, 5, 8, 10 and 11 as follows.

LISTING OF CLAIMS

1. (currently amended) A sequence controller for system control provided with a data holding unit storing data from a data preparation/input unit, and a control unit, wherein:

said data preparation/input unit comprises a system control setting menu that is configured with a table having column headings and row headings, either of the headings including operation data items and condition data items and the other of the headings including operation step items, wherein operation data instructing operations and condition data for causing said operations in accordance with a predetermined sequence are prepared by setting the operation and condition data at each operation step in said system control setting menu.

said data holding unit stores operation data instructing operations and condition data for causing said operations in accordance with a predetermined sequence, and

said control unit generates operation instruction signals for instructing said operations from said operation data in accordance with [[a]] the predetermined sequence and executes said operations when conditions defined in said condition data are satisfied.

2. (original) A sequence controller as set forth in claim 1, wherein said condition data includes monitoring data.

3. (original) A sequence controller as set forth in claim 1, wherein said condition data includes other numerical data.

4. (original) A sequence controller as set forth in claim 3, wherein said other numerical data is time data.

5. (currently amended) A sequence controller as set forth in claim 1, which determines whether said conditions are satisfied by comparing [[an]] input signals from said system being controlled and said condition data.

6. (original) A sequence controller as set forth in claim 1, wherein said control unit converts said operation data and condition data to input/output data of a programmable logic controller.

7. (cancelled)

8. (currently amended) A system control method having a plurality of steps, data of each operation step having operation data instructing operations and condition data for said operations, comprising:

a step of preparing said operation and condition data by setting operation and condition data at each operation step in a system control setting menu that is configured with a table having column headings and row headings, either of the headings

including operation data items and condition data items and the other of the headings including operation step items,

a step of generating operation instruction signals from said operation data
and

a step of causing operation of said system by said operation instruction signals when said condition data and data obtained from said system match.

9. (original) A system control method as set forth in claim 8, wherein said condition data includes preset time data and steps for causing operation of said system cause operation of said system conditional on said time having elapsed.

10. (currently amended) A control system provided with:

a data preparation/input device for preparing operation data for causing operation in accordance with a predetermined sequence and condition data for causing said operation as numerical data,

a programmable logic controller having a data holding unit for storing numerical data input from said data preparation/input device and a control unit, and

a production system having various types of sensors, wherein

said data preparation/input unit comprises a system control setting menu that is configured with a table having column headings and row headings, either of the headings including operation data items and condition data items and the other of the headings including operation step items, wherein said operation data and condition data

with the predetermined sequence is prepared by setting the operation and condition data at each operation step in said system control setting menu,

said programmable logic controller generating operation instruction signals from said operation data and causing operation of said production system when said condition data matches with data from detection signals from said sensors.

11. (currently amended) A programming method for producing a program for a programmable logic controller, comprising:

a step of forming steps of processing comprised of a plurality of steps by operation data and operation condition data for that operation based on operation routines,

a step of storing said operation data and said operation condition data as numerical data in accordance with said operation routines, and

a step of converting said numerical data to data for each slot of said programmable logic controller; wherein

said step of forming steps of processing comprises a step of preparing said operation and condition data by setting operation and condition data at each operation step in a system control setting menu that is configured with a table having column headings and row headings, either of the headings including operation data items and condition data items and the other of the headings including operation step items.